

1.2 m | 4 ft High Performance Parabolic Reflector Antenna, Single-polarized, 12.7-13.25GHz



## HP4-13

The HP High Performance Series by RadioWaves offers a full line of high performance parabolic antennas engineered to provide ETSI class 2/3 radiation pattern performance as well as excellent gain. RadioWaves field-proven pre-assembled antennas and robust pole-mounts ensure “set and forget” installation with minimal post-installation maintenance. The included radome ensures robust and reliable performance under the most challenging conditions. If it’s rugged, it must be RadioWaves!

### FEATURES AND BENEFITS

- High Performance ETSI Class 2/3\* Parabolic Antennas – Excellent performance for a wide range of applications
- Fully Preassembled at the Factory – Simplifies installation on site and guarantees “factory-tested” quality

\*ETSI Class depends on frequency band

## SPECIFICATIONS

### General

|               |  |
|---------------|--|
| Antenna Type  | High Performance Parabolic Reflector Antenna |
| Size, nominal | 4 ft   1.2 m                                 |
| Polarization  | Single                                       |

|                              |                                    |
|------------------------------|------------------------------------|
| Standard RF Connector Type   | WR75                               |
| Standard RF Connector Suffix | RS (append suffix to model number) |

### Electrical

|                                   |                  |
|-----------------------------------|------------------|
| Operating Frequency Band          | 12.7 - 13.25 GHz |
| Half Power Beamwidth, Horizontal  | 1.4 degrees      |
| Half Power Beamwidth, Vertical    | 1.4 degrees      |
| Cross-Polarization Discrimination | 30 dB            |
| Front to Back Ratio (F/B)         | 70 dB            |

|                      |          |
|----------------------|----------|
| Gain, Low Frequency  | 41.8 dBi |
| Gain, Mid Frequency  | 41.9 dBi |
| Gain, High Frequency | 42 dBi   |
| VSWR                 | 1.37:1   |
| Return Loss          | -16.1 dB |

### Mechanical

|                               |                    |
|-------------------------------|--------------------|
| Fine Azimuth Adjustment       | +/- 10 degrees     |
| Fine Elevation Adjustment     | +/- 25 degrees     |
| Mounting Pipe Diameter, Min   | 4.5 inch   11.4 cm |
| Mounting Pipe Diameter, Max   | 4.5 inch   11.4 cm |
| Net Weight                    | 85 lbs   38.3 kg   |
| Wind Velocity Operational     | 90 mph   145 km/h  |
| Wind Velocity Survival Rating | 125 mph   201 km/h |

|  |                      |
|--|----------------------|
| Mechanical Configuration                     | HP4-LoFreq           |
| Axial Force (FA)                             | 737 lbs   3278 N     |
| Side Force (FS)                              | 365 lbs   1623 N     |
| Twisting Moment (MT)                         | 784 ft-lbs   1063 Nm |
| Operating Temperature Range                  | -40 to +60 C         |
| Max Pressure, PSIG, (if waveguide interface) | 5                    |

### Regulatory Compliance

|                            |                 |
|----------------------------|-----------------|
| FCC                        | Part 101 Cat. B |
| Industry Canada Compliance | SRSP312.7 A     |

|                |              |
|----------------|--------------|
| ETSI           | 302217 R1 C2 |
| RoHS-compliant | Yes          |

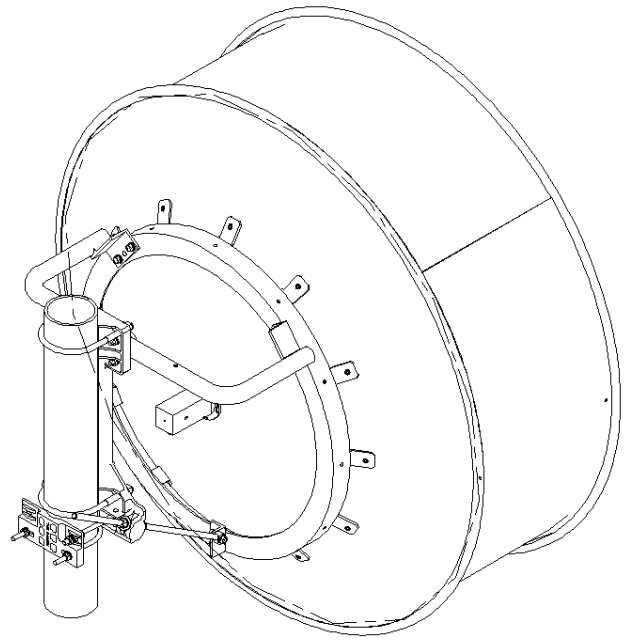
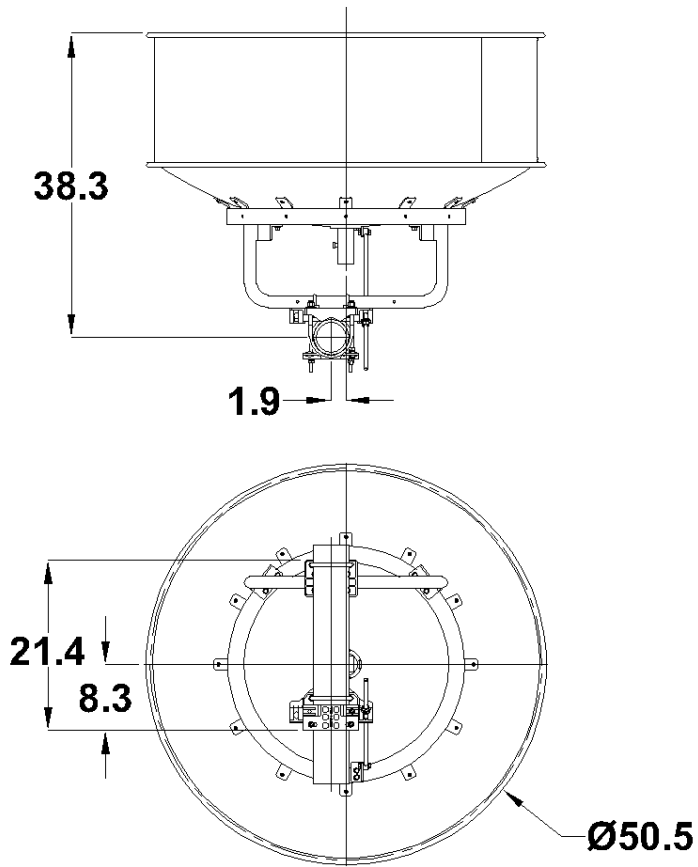
### Shipping Information

|              |                   |
|--------------|-------------------|
| Package Type | Wood Crate        |
| Gross Weight | 196 lbs   88.9 kg |

|                       |                                    |
|-----------------------|------------------------------------|
| Dimensions, L x W x H | 59 x 35 x 60in   180 x 89 x 152 cm |
| Shipping Volume       | 71.7 cu ft   2.03 cu m             |

\*Additional OEM interfaces and adapters may be available. Contact RadioWaves for a complete and current list of available adapters.

TECHNICAL DRAWINGS



**HP4-LoFreq**